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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PHAM, THOMAS K

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,303

Applicant(s)

RICHARDS ET AL.

Examiner

Thomas K Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This action in response to the request for re-consideration filed 10/21/2004.

Quotations of U.S. Code Title 35

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 103

6. Claims 1-3, 9-11, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,192,365 ("Draper") in view of U.S. Patent 5,758,300 ("Abe")

Regarding claim 1

Draper teaches a method for sharing knowledge and information amongst a plurality of users that can be either online or offline, said method comprising: compiling said knowledge and information into data objects, said data objects defining logic trees (col. 5 lines 14-24, "A database is a collection ... represented by tree structures"); storing said data objects in a central database in a network (fig. 1, element 34); and providing electronic access to a database with a plurality of client devices (col. 4 lines 35-37), the client devices being adapted to store locally a copy of each of the data objects for offline utilization by the users with the client devices (col. 5 lines 6-11) wherein changes to any of the data objects stored in the central database are automatically reflected in said local copies of the changed data objects through a synchronization process that occurs whenever the client device accesses services provided by said network (col. 3 lines 9-25, "Transactions and updates ... by that checkpoint"). Draper does not specifically teach the data represent the cumulative knowledge and information regarding a plurality of situations that are expected to be encountered by said users. However, Abe teaches the diagnostic data represents cumulative knowledge and information regarding a plurality of situations that are expected to be encountered by the users (col. 6 lines 19-41, "the command already inputted ... communication control circuit 67") for the purpose of aggregating or analyzing sophisticated failure problems of a vehicle. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the cumulative diagnostic data of Abe with the

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synchronizing system of Draper because it would provide for the purpose of aggregating or analyzing sophisticated failure problems of a device.

Regarding claim 2

Draper and Abe teach synchronization process with one or more of said data objects wherein the host uploads read out data stored in the portable client devices (see Abe col. 6 lines 35-41, “the data sent from ... communication control circuit 67”), the read out data having previously been collected in response to a work manual instructions provided by a user (see Abe col. 5 lines 51-60, “the service mechanic inputs ... to the engine control unit 2”).

Regarding claims 3 and 14

Draper and Abe teach data objects define a diagnostic function such that the client portable devices are adapted to automatically analyze data obtained from an electronic control unit D (see Abe col. 3 lines 55-64, “the diagnosis system ... the electronic control unit D”).

Regarding claims 9 and 19

Draper teaches synchronization process runs on said client device as a background process (col. 15 lines 35-38, “merging does not include ... triggered by file access”).

Regarding claim 10

Draper teaches a system for sharing knowledge and information amongst a plurality of users that can be online or offline, said system comprising: a central electronic information network having a database and a server, said database containing a plurality of data objects and said data objects defining logic trees (col. 5 lines 14-24, “A database is a collection ... represented by tree structures”); and a plurality of portable client devices (col. 4 lines 35-37), said client devices each storing copies of said data objects locally for utilization by said users on demand (col. 5

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lines 6-11), wherein whenever a given client device connects to the central network for any reason, said given client device synchronizes its data object copies with those in the database such that any recent changes to said data objects stored in said database is reflected in said client devices' during offline sessions (col. 3 lines 9-25, "Transactions and updates ... by that checkpoint"). Draper does not specifically teach the data represent the cumulative knowledge and information regarding a plurality of situations that are expected to be encountered by said users. However, Abe teaches the diagnostic data represents cumulative knowledge and information regarding a plurality of situations that are expected to be encountered by the users (col. 6 lines 19-41, "the command already inputted ... communication control circuit 67") for the purpose of aggregating or analyzing sophisticated failure problems of a vehicle. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the cumulative diagnostic data of Abe with the synchronizing system of Draper because it would provide for the purpose of aggregating or analyzing sophisticated failure problems of a device.

Regarding claim 11

Draper and Abe teaches the logic trees define information types selected from the group consisting of diagnosing algorithms, survey questions, and troubleshooting instructions (see Abe col. 4 lines 58-63, "the host computer B ... to the control unit 51").

7. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,192,365 ("Draper") in view of U.S. Patent 5,758,300 ("Abe") and further in view of U.S. Patent No. 6,476,833 ("Moshfeghi").

Regarding claims 4 and 15

Draper and Abe teach data objects are encoded in a database but do not teach using coding selected from the group consisting of extensible markup language or tokenized strings. However, Moshfeghi teaches providing a configurable extensible markup language browser functionality embedded in the context of a client-server application running on a user device (col. 3 line 43 to col. 4 line 5, "Filtering methods are described ... the user profile records") for the purpose of supporting a universal markup language that are designed for use in consumer appliances. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the XML code of Moshfeghi with the systems of Draper and Abe because it would provide for the purpose of supporting a universal markup language that are designed for use in consumer appliances.

8. Claims 5-8, 12-13, 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,192,365 ("Draper") in view of U.S. Patent 5,758,300 ("Abe") and further in view of U.S. Patent No. 5,974,238 ("Chase").

Regarding claims 5, 12 and 20

Draper and Abe teaches client devices are adapted to access services provided by synchronization over a network but do not teach connecting to said network over a wireless data network, and the synchronizing process occurs whenever the client devices connect to the network wirelessly. However, Chase teaches synchronization between a handheld and a host computer over a wireless network whenever connection is available (col. 3 lines 28-39, "performing dynamic synchronization ... the handheld or host computer") for the purpose of resolving any data conflicts between the host and handheld device in real time. Therefore, it

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would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the real time synchronization of Chase with the systems of Draper and Abe because it would provide for the purpose of resolving any data conflicts between the host and handheld device in real time.

Regarding claims 6 and 16

Chase teaches users can optionally connect to said network and utilize said data objects stored in said database in real-time (col. 3 lines 15-25, “a real time solution that ... data coherency problem”).

Regarding claims 7 and 17

Chase teaches user connects to said network using a web browser (col. 9 lines 39-41, “A file viewer or browser ... and data base files”).

Regarding claims 8 and 18

Chase teaches the web browser is running on a device selected from the group consisting of an online wireless client device or a wired Internet connected device (col. 6 lines 59-66, “Typically, data transmitted via the Internet ... intra-corporation networks”).

Regarding claim 13

Chase teaches client device has a touchscreen display and wireless communication hardware (col. 5 lines 16-23, “two alternative views ... to provide input”).

Response to Arguments

In the remark the applicant argues that cited reference fails to disclose: "tree structure data objects that are synchronized in a portable client devices" as to claims 1 and 10.

In response to applicant's argument,

It is noted that prior art Draper (6,192,365) teaches column 5 lines 6-25 as follow:

"With reference to FIG. 2, at least two of the computers 28 are disconnectable computers 40 configured according to the present invention. Each disconnectable computer 40 includes a database manager 42 which provides a location-independent interface to a distributed hierarchical target database embodied in convergently consistent replicas 56. Suitable databases include Novell directory services databases supported by NetWare 4.x.

A database is a collection of related objects. Each object has associated attributes, and each attribute assumes one or more values at any given time. Special values are used internally to represent NULL, NIL, EMPTY, UNKNOWN, and similar values. Each object is identified by at least one "key." Some keys are "global" in that they are normally unique within the entire database; other keys are "local" and are unique only within a proper subset of the database. A database is "hierarchical" if the objects are related by their relative position in a hierarchy, such as a file system hierarchy. Hierarchies are often represented by tree structures."

Draper clearly stated a distributed hierarchical target database wherein "hierachical" is defined as a database with their objects are related by tree structures. Furthermore, the data objects are synchronizing locally with the central database in replica 56. Therefore, Draper teaches the logic tree data objects synchronization as claimed.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: **Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450**. Responses may also be faxed to the **official fax number (703) 872- 9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham
Patent Examiner

TP

December 27, 2004


Anthony Knight
Supervisory Patent Examiner
Group 3600